

A parent's guide to... tablets and mobile phones

How much technology is healthy for children, and how can you get a good balance? *Penny Tassoni* sets out what you need to know

Imagine the scene: a parent and child are sitting side by side in a restaurant, each of them with a gadget in hand. While the parent is accessing social media via a phone, the child is happily swiping the screen of a mini-tablet. A few years ago, this scene could not have taken place, but today it is fast becoming the norm. So how should we view this advance in technology, and more importantly how might it impact on young children's development?

FIVE THINGS YOU NEED TO KNOW ABOUT TABLETS AND MOBILE PHONES

1. Technology is here to stay

While there are some experts who take a very pessimistic approach to technology, the reality is that it is here to stay. Year on year, the number of children under five using tablets and mobile phones to play games and watch programmes is increasing. In 2014, the Childwise survey indicated that 42 per cent of children were using them; this year, it is up to 73 per cent. There are, no doubt, potential downsides to children having early access to screen-based technology, but

expecting today's children to be living in a technology-free zone is no longer realistic for most families. Yet the new gadgets bring possibilities too. These include opportunities for children to use logic, develop problem-solving skills, and learn early literacy and numeracy skills.

2. Research into the developmental effects on children lags behind the technology

The speed at which screen-based technology has been introduced into young children's lives means that no one fully knows the impact on children's development. Projections about possible effects tend to use data from television viewing, but computer and tablet use can be very different to watching a TV.

In the absence of data, most experts would therefore suggest that parents should err on the cautious side when deciding how much overall time children spend using computers and tablets. In terms of development, the danger seems to be that the time spent engaged in screen activity means that other opportunities for developing other skills are squeezed out.



3. Screen time might affect children's eyesight

While myopia (short-sightedness) is partly inherited, the amount of time that children spend fixing their gaze at objects that are close to them, as opposed to objects on the horizon, appears to be a factor in the later development of myopia. Spending plenty of time outdoors seems to be beneficial for children's eyesight, so it seems sensible to balance screen time with opportunities for children to be outdoors.

4. Levels of physical activity need to be watched

Although there are benefits for children, parents need to be aware that screen time is essentially a sedentary activity. Some small hand movements are developed using tablets and computers, but other skills such as running, balance and co-ordination are not being practised during this time.

These movements are important for children's health because they help to develop children's heart and



lung function. They are also thought to be links between physical activity and brain development.

5. Screen-based activities do not develop communication and interpersonal skills

The latest statistics would suggest that many children under five are 'self-sufficient' when it comes to using mobile phones and tablets to access games and programmes.

It is good for children to have opportunities to be independent and also to feel competent, yet many games and programmes do not help children practise the skills of human interaction. This includes making eye contact, recognising and responding to facial expressions, and being involved in two-way conversations. These skills can only be developed through face-to-face interactions.

MAXIMISING TECHNOLOGY OPPORTUNITIES

There are many positive ways in which children can explore and learn from technology. Children

will often gain more in terms of language and other skills if they can use technology alongside an adult as part of a shared learning experience. Here are some ways children can learn and benefit from technology:

Skype conversations

Using Skype – or other VoIP (Voice over Internet Protocol) systems – is a great use of technology when young children are far from other family members or friends. It is particularly useful for children who are bilingual as a way of maintaining the home language.

Internet research

With the support of an adult, a child may use the internet to find out more about something that has interested them – for example, finding out more about how spiders make webs.

Google Earth or Instant Street View

With the support of an adult, children can look at an image and a map of their pre-school, their home or a place of interest. This can be a good tool to use for transitions, so that children can 'see' where they will be going – for example on holiday or to a new childminder's home.



Children's TV programmes

Unlike watching television programmes live, you can choose online content carefully to suit your child's interest and also stage of development. For added developmental benefits, watch programmes with your child.

Educational games

Educational apps can help introduce your child to numbers and letters, and sounds and shapes. You can also look out for games that encourage problem solving, such as moving puzzle shapes. For added benefits for your child, sit with your child as they are playing.

Programmable toys

Some toys provide children with early experiences of programming. Look out for toys such as Bee-Bot or Constructa-Bot.

Photographs and video clips

Tablets and mobile phones allow children to take photographs and video clips of their world.

IN THE REAL WORLD

While children are likely to enjoy and can benefit from technology, this must not be at the expense of real-life experiences. Developmentally, young children need to be active ▶

and to learn from all of their senses. Play is a key way in which this can take place and, ideally, you need to make sure your child has plenty of time to play with real objects.

Your child will also benefit from other activities, including sharing books with you, going to the park and helping with everyday chores. As with food, you need to think of technology use as part of an overall developmentally 'balanced diet'.

TIPS FOR AVOIDING THE PITFALLS OF TECHNOLOGY

1. Be a role model

Think about how you use technology yourself. Do you turn off or ignore devices or do look at your mobile phone when you are in the middle of a conversation or during mealtimes? How well you can control your own responses to technology is likely to influence your child's use of it later.

2. Keep control

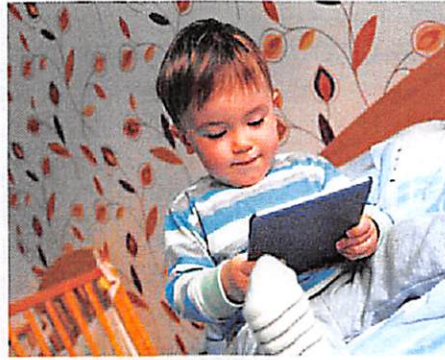
Unless you want your child to order something online or to download games without your permission, make sure that you use parental controls on mobiles and tablets.

3. Know what your child is doing and when

If your pre-school child gets into the habit of using devices without parental supervision or permission, you may find it hard to enforce this when your child is older and potentially more vulnerable to cyber bullying or grooming. Don't let your child have access to the internet without you being in the room.

4. Make sure bedrooms are free of gadgets

One reason some young children may not fall asleep quickly is the use of technology in the bedroom. The blue light emitted by devices is



Ensure the bedroom is free of gadgets, as they can affect sleep

partly responsible for this. Instead, try the traditional approach of sharing a book with your child.

5. Be selective about games

Choose games carefully and check that they are right for your child's current level of development. Think about what exactly they are teaching your child. Check also that any games that introduce links between letters and sounds are using the same sounds as those used in schools. The latest approach to phonic teaching uses only pure sounds that are quite short – for example, 'c' not 'c...errrr'.

SCREEN TIME

There is no clear-cut answer to how much time children should be spending using technology because it depends very much on what the technology is being used for. At present, the safest bet is to use the NHS guidelines: nothing for children under two, and up to two hours a day for two- to five-year-olds.

One of the key things to consider, though, is that the current ways in which children are accessing technology can be very sedentary. The health guidelines for children under five are that they should be spending a minimum of three hours a day doing moderate physical activity, with a warning that sitting should be kept to a minimum.

COMMON QUESTION

Q. My four-year-old son's language is slightly delayed. Should I limit the amount of time he spends on the tablet? He spends at least three hours a day playing online games.

A. While you might want to consider reining in the time that he spends alone with the tablet, try also to spend time with him when he is actually playing online games. Think also about other opportunities when you can talk together – for example, sharing a book, going for a walk to the park, or cooking. For children's language to develop, they need plenty of chatting time with adults.

GREAT ACTIVITIES USING TECHNOLOGY

1. Create a photo album

Why not help use technology to create a photo album with your child? This could be a gift for a close relative. Together, plan which photographs to take or which ones to select. Your child could also create some pictures to illustrate it and together you could include captions.

2. Go for a walk

If you have a mobile phone, why not go for a walk around your local area and see if your child can spot the differences between the Google street view and the real thing? Perhaps some shops have changed hands or some houses have had their doors painted.

3. Create an obstacle course for a programmable toy

If you have or can borrow a programmable toy, see if your child can make an obstacle course for it. You will need to help your child break down each manoeuvre into small steps, but this is all part of learning about how to code. ■